

REMARKS

This application contains claims 1-69. Claims 2, 3, 24, 25, 46 and 47 have been canceled without prejudice. Claims 1, 4-7, 23, 26-29, 45 and 48-51 are hereby amended. No new matter has been introduced. Reconsideration is respectfully requested.

Applicant thanks Examiners Lu and Ali for the courtesy of a personal interview with Applicant's representative, Daniel Kligler (reg. No. 41,120), held in the USPTO on September 26. At the interview, Applicant's representative explained the distinction of the independent claims in the present patent application over the cited art. The limitations of dependent claims 3 and 17 were also discussed. The Examiners agreed that if the independent claims were amended to incorporate the limitations of claim 3, the amended claims would be allowable over the cited art. Applicant has amended the claims accordingly.

Claims 1, 2, 17-19, 23, 24, 39-41, 45, 46, 61-63 and 67-69 were rejected under 35 U.S.C. 103(a) over Sun HPC (Sun HPC Cluster Tools™ 3.1 Administrator's Guide). While disagreeing with the grounds of rejection, Applicant has amended independent method claim 1 to incorporate the limitations of claims 2 and 3 (now canceled), as suggested in the interview, in order to further sharpen the distinction of

the present invention over the cited art. Independent apparatus and software claims 23 and 45 have similarly been amended to incorporate the limitations of claims 24-25 and 46-47 (now canceled), respectively. Dependent claims 4-7, 26-29 and 48-51 have been amended for proper dependence from the independent claims.

Claim 1, as amended, is drawn to a method for managing data storage, in which a session of a data management (DM) application is initiated on a first node in a cluster, and a request is submitted to parallel file system software on a second node to mount a file system on the second node. In response, a mount event message is sent from the second node to the first node for processing by the DM application on the first node. After instances of the file system have been mounted on the first and second nodes, the second node receives a request to unmount its instance of the file system. In response to this request, the second node sends a preunmount event message to the first node, which responds so as to permit the instance of the file system on the second node to be unmounted without unmounting the instance on the first node.

Sun HPC describes a cluster runtime environment (CRE), which includes what is termed a "parallel file system" (PFS, because it uses a parallel file layout, in which files

are distributed across two or more disks). The PFS provides commands that an administrator can use to create, mount, and monitor the status of PFS file systems (page 43), as well as unmounting the file system (pages 54-55). Sun HPC, however, neither teaches nor suggests the use of a preunmount event message prior to unmounting a file system instance, as required by claim 1.

In rejecting claim 3 in the present official action, the Examiner noted that SunSoft (Eisler et al., NFS File Sets) teaches premounting of shared library file systems. SunSoft, however, relates to shared libraries under a server-based network file system (NFS), and neither teaches nor suggests sending and responding to preunmount event messages in connection with multiple instances of a parallel file system, as recited in claim 1.

Therefore, as agreed in the interview, claim 1, as amended, is patentable over the prior art of record. In view of the patentability of claim 1, dependent claims 17-19 and 67 are also believed to be patentable. Apparatus and software claims 23, 39-41, 45, 61-63, 68 and 69 are believed to be patentable, as well, for the same reasons.

Claims 3-16, 20-22, 25-38, 42-44, 47-60 and 64-66 were rejected under 35 U.S.C. 103(a) over SunHPC in view of SunSoft (mentioned above) and/or Bober (U.S. Patent

6,718,372). Claims 3, 25 and 47 have been canceled, as noted above. In view of the patentability of the amended independent claims, dependent claims 4-16, 20-22, 26-38, 42-44, 48-60 and 64-66 are also believed to be patentable.

Applicant has studied the additional references that were made of reference by the Examiner, and believes the claims in the present patent application to be patentable over these references, as well, whether the references are taken individually or in any combination.

Applicant believes the amendments and remarks presented hereinabove to be fully responsive to all of the grounds of rejection raised by the Examiner. In view of these amendments and remarks, applicant respectfully submits that all of the claims in the present application are in order for allowance. Notice to this effect is hereby requested.

If the Examiner has any questions he is invited to contact the undersigned at 202-628-5197.

Respectfully submitted,

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